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THE ROLE OF DIGITAL TECHNOLOGIES IN THE ACTIVITIES OF LAW ENFORCEMENT AGENCIES

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ABSTRACT:

This article analyzes the role and significance of digital technologies in the activities of law enforcement agencies. It highlights, through examples, how the introduction of information and communication technologies in systems such as the prosecutor's office, internal affairs, national security, customs, and forensic examination increases efficiency, transparency, and responsiveness. Furthermore, the paper emphasizes how digitization contributes to the protection of citizens' rights and freedoms, reduces corruption risks, and strengthens public trust. The article also examines the practical outcomes and prospects of reforms based on digital technologies.

INTRODUCTION. The Constitution of the Republic of Uzbekistan enshrines the principle that democracy in the country is based on universal human values. According to these principles, the individual, their life, freedom, dignity, and other inalienable rights are regarded as supreme values. Democratic rights and freedoms are guaranteed and protected by the Constitution and laws.

These and other constitutional provisions aimed at ensuring peaceful and creative life form a part of the primary duties of state bodies and officials. State bodies address various tasks related to economic and social development, the implementation of foreign policy, the advancement of science, education, and culture, and the strengthening of defense capacity. Alongside these core functions, all state bodies are also responsible for upholding law and order, protecting the rights and freedoms of individuals, and safeguarding the legal interests

of both natural and legal persons. This includes the prevention and investigation of crimes and the enforcement of legal norms.

Given that the implementation of the above-mentioned duties is a guarantee for building a democratic state and a robust civil society, the realization of these goals also depends on the activities of the judiciary and law enforcement institutions. Therefore, the concept of "judicial and law enforcement activity" refers to the actions carried out by the state and its specially authorized bodies in accordance with legal procedures, aimed at protecting the rights, freedoms, and legitimate interests of individuals and legal entities, and at ensuring legality and public order through the application of legal measures.

Judicial and law enforcement activity involves the functioning of specialized bodies authorized to protect the human rights, freedoms, and legitimate interests of both individuals and the state. This includes ensuring legality and public order in accordance with the law through appropriate legal measures.

Law enforcement agencies are authorized state bodies and public institutions that operate based on legal and democratic principles. Their mission includes ensuring legality and public order, protecting the legal rights and freedoms of citizens, society, and the state, preventing legal violations, and applying state coercion or social influence to those who breach the law. These agencies include the prosecutor's offices, judicial bodies, internal affairs departments, the national security service, and others. Their key responsibilities involve prosecutorial supervision, detection and investigation of crimes, provision of legal assistance, and more.

Data and Analysis

In modern society, the activities of law enforcement agencies—including departments of internal affairs, the prosecutor’s office, national security services, forensic medical institutions, customs authorities, migration and passport systems, and other relevant bodies—play a decisive role in ensuring state stability, social justice, and the rule of law. In today’s digital age, these agencies increasingly rely on information technologies to carry out their functions more efficiently, promptly, and transparently. These technologies not only support the identification and investigation of offenses but also contribute to their prevention, statistical analysis, prompt processing of citizen appeals, effective public communication, and the consistent implementation of reforms. Foremost among these is the application of information technologies within the internal affairs system. Law enforcement bodies actively use a wide range of digital tools in the fight against crime, the maintenance of public order, and the enforcement of road safety. Notably, the "Unified Electronic Crime

Statistics" system has created a comprehensive and structured database containing information on types of crimes, their locations, times, and circumstances. This facilitates the forecasting of criminal trends, development of preventive measures, and identification of high-risk areas.

Moreover, within the framework of the “Safe City” initiative, surveillance cameras, automatic license plate recognition systems, and facial recognition algorithms have become essential tools in combating crime. These systems promptly detect traffic violations, street crimes, and threats to public safety, enabling the rapid implementation of appropriate measures. Video surveillance systems play a critical role, especially during public events, mass gatherings, and national celebrations.

The role of information technology is steadily growing in criminal investigations as well. Forensic laboratories increasingly use technologies such as DNA analysis, fingerprint databases, voice recognition systems, software for creating psychological profiles, and other advanced tools. Additionally, criminalistics technologies allow for the recovery of data from digital devices, identification of malicious software, and monitoring of information flows, which enhances the effectiveness of complex investigative procedures.

The digital transformation of the prosecutor’s office represents a major breakthrough in legal practice. Systems that automate prosecutorial functions—for instance, the "E-Prosecutor" information platform—enable the electronic processing of complaints and appeals, supervision of criminal cases, preparation of indictments, and documentation submitted to the courts. This not only increases the speed and transparency of prosecutorial operations but also reduces human error.

In the field of national security, confidentiality and data protection are of paramount importance. Therefore, cryptographic systems, encrypted communication channels, cybersecurity tools, and AI-driven threat prediction algorithms are widely deployed. These technologies significantly enhance the ability to detect security threats, combat foreign information influence, and monitor social networks effectively.

In the customs system, QR codes, online tracking of goods, automated declaration verification programs, and real-time GPS monitoring of cargo vehicles have been introduced. These innovations are instrumental in detecting and preventing customs violations and combating document forgery. For example, the “TIR-Electronic” system developed by the State Customs Committee of Uzbekistan ensures speed and reliability in international road transport. In forensic medical examination, digital laboratories, computer tomography, genetic testing, advanced software for biological material analysis, and

electronic case management systems are actively used. These technologies enhance the accuracy and reliability of expert conclusions and strengthen cooperation with investigative bodies. Significant digital reforms have also been implemented in the passport and migration system in recent years. Electronic passports, biometric databases, online migration services, and the automated issuance of travel permits ensure citizens' freedom of movement, safety, and the protection of personal data. Biometric passports replacing exit visas and the "E-IMMIGRATION" system for monitoring foreign nationals in Uzbekistan reflect a modernized legal order in the country.

Combating cybercrime is another critical aspect of the digital legal system. As information technology advances globally, cybercrimes such as fraud, identity theft, financial attacks, online threats, and the dissemination of illegal content are increasing. This imposes new responsibilities on law enforcement agencies. As a result, cybersecurity centers under the Ministry of Internal Affairs operate across Uzbekistan. Using modern software tools, these centers identify internet-based offenses and trace criminals through international networks. Remote investigation techniques, online testimony collection, and handling of electronic evidence are not only new opportunities but also represent a novel approach in the legal system. For example, suspects or witnesses in certain cases can now be interrogated online, depending on their location. This ensures that investigative procedures are conducted efficiently and without bureaucratic delays.

Results

Ensuring data security and confidentiality in the legal system has become a critical and global issue. Today, the information used by government agencies, lawyers, courts, prosecutors, notaries, and other law enforcement structures is not merely a collection of numbers, but rather includes sensitive content such as personal lives, criminal case materials, financial transactions, state secrets, and legal agreements—all of which require a high level of protection. Maintaining the confidentiality, integrity, and controlled access to this information is essential for ensuring the legality of legal processes, fair administration of justice, and the public's trust in the legal system. Cryptographic technologies play a key role in safeguarding legal information. These technologies encrypt data, allowing access only to authorized individuals. For instance, electronic court decisions, investigation documents, or prosecutorial conclusions are encrypted and transmitted using special certificates. Protection is provided through algorithms such as AES (Advanced Encryption Standard), RSA (Rivest–Shamir–Adleman), and SHA (Secure Hash Algorithm), which not only encrypt data but also safeguard it from unauthorized access, tampering, or falsification.

Legal proceedings—especially those involving civil, criminal, and economic cases—often involve large volumes of electronic documents. Their storage in data centers, transmission via email, or exchange among parties requires high-level security. Therefore, authentication and authorization systems are implemented to verify users and grant only the necessary access rights. Judges, investigators, lawyers, and clerks access systems using individual login credentials, special electronic tokens, or biometric data such as fingerprints or facial recognition. This significantly reduces the likelihood of unauthorized access.

In modern legal practice, many documents, evidence files, and digital records are stored on online platforms. As a result, constant protection against external threats—including viruses, hacking attempts, data leaks, and social engineering attacks—is required. To address these risks, firewalls, antivirus software, DDoS protection tools, intrusion detection and prevention systems (IDS/IPS), and other cybersecurity measures have been implemented. For instance, specialized departments responsible for information security operate within the Ministry of Justice of the Republic of Uzbekistan.

Additionally, cloud technologies are increasingly integrated into the legal system. Platforms such as “E-Sud,” “my.gov.uz,” and “Lex.uz” host thousands of legal documents that can be viewed or downloaded online. However, cloud services come with inherent risks—without consistent security monitoring, entire databases may be lost or stolen. Therefore, modern systems are being reinforced based on the Zero Trust Architecture (ZTA) principle, which scrutinizes every user, device, and access attempt, granting access only upon verified trustworthiness.

Blockchain technology is also an emerging area in legal document storage. Official documents (e.g., court decisions, contracts, and property records) can be stored in a decentralized and immutable manner using blockchain. Once entered, no one can alter the data, and every action is traceable and transparent to all participants. This is especially important for notarial services, property rights authentication, and electronic contracts.

In today’s legal system, it is vital that professionals have knowledge of information security. Even the most advanced technology can be compromised by user negligence. Therefore, training courses, special manuals, and certification systems in cybersecurity are being introduced for legal personnel. According to the Presidential Decree of February 20, 2018, titled “On Measures for Further Development of Information Technology and Communications,” the information infrastructure of state institutions is continuously monitored, and staff readiness in cybersecurity is kept under control. Moreover, with the advent of online court broadcasts, the use of electronic evidence, and video recordings of

indictments and testimonies, digital footprints and electronic protocols are becoming increasingly important. Every action—such as opening a file, making edits, or copying documents—is recorded by special systems, which aid in future investigations and in identifying the source of any data breaches.

Conclusion

In conclusion, the application of information technologies in the activities of law enforcement agencies contributes significantly to the modernization of the entire legal system. Digital technologies have made the processes of crime detection, investigation, prevention, citizen interaction, transparency, and enforcement of the rule of law more effective and efficient. Therefore, continuing reforms in this area, improving technological infrastructure, enhancing cybersecurity, and regularly training personnel remain among the key priorities of the law enforcement system. Ensuring information security and confidentiality in legal procedures involves not only technical but also legal and organizational measures. The integrity, immutability, and restricted dissemination of information guarantee fair trials, uphold the rule of law, and protect citizens' legal rights. Accordingly, the continuous development of digital technologies, the adoption of national strategies on cybersecurity, systematic staff training, and the integration of international best practices are essential for shaping a modern and competitive legal system in Uzbekistan.

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